1. **Please advise if there are any restrictions that would prevent this purchase from being awarded to a company with its headquarters and manufacturing facility located outside the US.**

   See solicitation for FAR 52.212-5(b) Contract Terms and Conditions Required to Implement Statutes or Executive Orders--Commercial Items. (JAN 2009)

   (6)(i) 52.219-6, Notice of Total Small Business Set-Aside (JUN 2003) (15 U.S.C. 644).

   The United States fulfills certain socio-economic goals through its government procurement. Contracting officers must, with few exceptions, reserve or "set aside" all or part of a contract of any size if they reasonably expect offers at fair market prices from two or more "responsible" U.S. small businesses.

   "Small" is a term defined for U.S. federal procurement as a for-profit business, registered to do business in the United States, with fewer than a specified number of employees (in manufacturing) and/or less than a specified level of revenue (in services), as determined by the SBA for a product or service class. FAR Part 19 provides details.

   A non-small business may perform up to 49% of the value of the contract as a subcontractor.

2. **Please clarify if the manufacturer is required to provide testing or certification results as proof that EMI Attenuation and/or Audible fan/vent noise requirements have been met or will all testing be conducted by the Government?**
   The vendor will not be required to provide testing or certification results. The Government will verify compliance to specifications for the 1st article items as per attachment J-2: *Government Acceptance Test Plan* provided in the solicitation.

3. **Does the Wedge Enclosure Configurations Table (page 4 of Attachment J-3) represent all of the wedge dimensions and angle requirements or will the design be required to accommodate additional dimensions or angles?**
   Yes, the table shows all the known configuration requirements.

4. **Section 3.2.1.4 (page 12 of Attachment J-1) indicates that "All displays shall be mounted to the enclosure using fixed height...monitor arms." However page 14 of the same section indicates that the "Display Height Range shall be 7 inches to 12 inches..." Please clarify if display height adjustability is a requirement.**
   Attachment J-1 / page 14 is revised to delete the words “Display Height Range” and replace with “Monitor Mounting Range”. The monitor arms must have a range for mounting the monitor during installation, but once mounted, the arm shall not “articulate” vertically when being moved by the user; it will have a fixed height.

5. **Please confirm the telephone dimensional requirements. Will the telephones used be the same as those currently used in Firing Room #4?**
   The specific telephones and their dimensions are unknown at this time. However, smaller wedges shall accommodate 7”W X 9”H X 3”D wall mounted telephones and larger wedges shall accommodate 11”W X 9”H X 3”D wall mounted telephones.

6. **Please confirm if the telephone brackets are to include a plug or jack for the telephone to plug into or is it simply a bracket for mounting the telephone?**
   The telephone brackets shall not include a plug or jack for the telephone. The Government requires offerors to provide telephone brackets for mounting the telephones. The Government will install the telephones using a standard telephone face-plate.

7. **Please confirm the definitions of CWS and SWS workstation towers referenced in attachment J-1, section 3.2.2.1 General - page 14.**
   The CWS and SWS workstation towers are the workstation towers defined per the first paragraph in attachment J-1, section 3.2.2.2 OE/TM Base - page 16:

   “At 84 inches (213.36 cm) wide, the OE/TM Base shall consist of three bays. Bays 1 and 3 accommodate two each workstation towers, not to exceed 19”H X 19”W X 9”D (48.26 cm H X 48.26 cm W X 22.86 cm D) each.”

8. **Section 3.1 (page 7 of Attachment J-1) indicates that the "hood provides a sound barrier." Please confirm if there are specific acoustical requirements to be achieved with the design of the hood.**
   There are no specific acoustical requirements for the hood as a “sound barrier”.

9. **Section 3.2.3.1 (page 17 of Attachment J-1) states that "Cable pathways shall extend up from the desktop to approximately 3 inches below the hood..." Please clarify if the cable pathways are expected to extend to approximately 3 inches below the top of the hood. Please also confirm if the cable pathways are not to be visible from the front of the enclosure (ie. concealed behind a removable panel).**
   The 3 inches is measured from the inside surface of the top of the hood to the top of the cable pathway. The cable pathways must hide the cables but the pathway may be visible from the front.

10. **Is it anticipated that all enclosure bays will require EMI shielding for all configurations, or would a design solution that incorporates an EMI shielded shroud that fits within the enclosures which can be added, removed or relocated within the enclosure or to other enclosures be viewed as a benefit?**

If an EMI shielded shroud is an acceptable solution, is there a requirement to provide EMI shielding for any of the cables that will be run within the console enclosure but not within the EMI shroud? If so, will the EMI cable shielding be the responsibility of the console manufacturer?

A shroud design may not provide the required shielding effectiveness for all equipment (e.g. workstation towers and RETMA mounted equipment) within the base. The entire OE/TM enclosure base, consisting of the 3 bays, must provide shielding per the specification including cable path ways between the bays. Offerors shall consider all the requirements of the specification in their proposal, including section 3.2.2.1 - *General*:

- Bases shall be finished metal and constructed in a manner which provides electromagnetic interference (EMI) attenuation in accordance with Table 3.2-8 with ventilation and cable penetrations.
- The bases shall provide internal cable management, EMI shielded cable penetrations through the desktop and below floor, and cabinet ventilation.

The offerors are responsible for identifying the best design approach and addressing how the design will meet the EMI attenuation requirement for applicable enclosures while considering EMI shielding effectiveness, minimizing reliance of consumables (i.e. EMI tape, film, chemicals, etc), treatment of penetrations, accessibility to the console and durability of materials

11. **Attachment J-1, section 3.2.1.3 calls for the hood and base side panels to be covered with Wilsonart laminate# 7054-60. We would like to build a steel/aluminum hood, with a powder coat finish. Covering the steel panels with laminate would add considerable cost to our proposal. Would it be possible to substitute steel powder coated panels for the laminate panels?**

    No. The design shall follow the stated color requirements of section 3.2.1.3

12. **Attachment J-1, section 3.2.2.1 calls for the base to be built using a "bay" concept. Is a partition required between the bays in a given console, or can it be open between the bays? If a partition is required, is EMI shielding required between the bays also?**

    There is no requirement for partitions between the bays. The entire OE/TM enclosure base, consisting of the 3 bays, must provide shielding per the specification.

13. **Attachment J-1, section 3.2.2.2, and section 3.2.2.3 call for bays in the base to accommodate workstation towers. Are adjustable shelves going to be required to support the workstation towers, or will the towers sit on the inside bottom of the base?**

    Adjustable shelves are not required.

14. Is the intent of the RFP to provide factory made or custom made products?

The RFP does not direct offerors to specifically propose any of these types of products. The RFP requires offerors to propose a best approach in meeting the stated requirements. It is at the offerors judgment to decide what approach can satisfy the need.

15. What is the total quantity sought in the first 70 days?

The 70 days for delivery applies to the following supplies (as described under item 001 in page 5 of the solicitation):

Item 001	Item Description	Min Quantity
	1st article items	
	FY2009	
001-A	OE/TM Enclosure Type C	1
001-B	OE/TM Mini Enclosure Type M	1
001-C	Wedge Enclosure Type A	1
001-D	5RU RETMA enclosure	2
001-E	6RU RETMA enclosure	1
001-F	Monitor Arms w/Mount	2
001-G	Telephone Brackets	1

16. Did the specifications come from a manufacturer of Console products? And if yes, who is the manufacturer?

No. The specification does not come from a specific manufacturer's product.

17. Are the specifications cast in stone as written? There are COTS products that are similar in design (but do not match the specs exactly). My company, as a manufacturer can supply the console to the spec as written but this would be at added expense to NASA due to the specific nature of the specifications.

The specification contains the minimum requirements that NASA is looking for. All requirements must be met.

18. What are the material requirements for the work surface?

Work surface materials are at the discretion of the offeror but the desktop surface shall be Wilsonart "Cloud Zephyr" #4856-60 or similar high pressure laminate (as defined in section 3.2.1.3 - *Colors*).

19. Can the jacks for the console be supplied in a box below the work surface (instead of inside as shown in the spec)?

No. The specification must be met as stated.

20. **What is the make and model of monitors to be used? (This is important due to articulation of arms – weight is a concern).**
    The specific monitor model is not known at this time and may vary across installations. Section 3.2.1.4 provides the maximum dimensions and weight used in the displays:

    "workstation display external dimensions are limited to 14"H X 19"W X 3.5"D (35.56 cm H X 48.26 cm W X 8.89 cm D) without stand. The maximum display weight is 18 pounds (8.16 kg)"

21. **Can the CWS and SWS work station be defined by make and model? Size and weight are needed.**
    The specific workstation model is not known at this time. Dimensions are given in the specification for a generic CWS and SWS workstation. The CWS and SWS workstation towers are the workstation towers defined per the first paragraph in attachment J-1, section 3.2.2.2 OE/TM Base - page 16:

    "At 84 inches (213.36 cm) wide, the OE/TM Base shall consist of three bays. Bays 1 and 3 accommodate two each workstation towers, not to exceed 19"H X 19"W X 9"D (48.26 cm H X 48.26 cm W X 22.86 cm D) each."

    The workstation weight does not exceed 45 pounds.

22. **Can the Desktop external jacks be excluded (we can supply the power and the locations for the jacks with a desktop device)? If jacks are needed, please define what type of jacks are necessary – understanding that RJ45 will be used, but for what standard of cable?**
    The specification only requires the design to accommodate the RJ45 jacks. The Government will obtain and install all RJ45 jacks.

23. **Exactly what type of jack would be required per Figure 3.2-14 Desktop Dual Intercom System Headset Jack (brand and manufacturer)?**
    The Intercom System Headset Jacks are Mil Std U-79/U (MIL-C-10544) used in conjunction with a U-77/U connector. Reference figure 3.2-14 in the specification for the D-punch details. The Government will obtain and install the Intercom System Jacks.

24. **For the telephone bracket, what telephone model and manufacturer will you be using?**
    Please refer to answers for questions 5 and 6.

25. **Is there a specific CFM requirement for the fans?**
    There is no specified CFM requirement for the fan but the final design must satisfy the requirements of the specification as defined in Section 3.2.2.1.

"Equipment installed in the base is designed to operate in an air conditioned environment with ambient room temperatures between +60° F (+15.6° C) to +80° F (+26.7° C) with extremes of uncontrolled temperatures between 52° F (11.1° C) and 95° F (35.0° C) for one (1) hour. Facilities in which the enclosures reside have Heating, Ventilating, and Air Conditioning (HVAC) systems that provide an ambient temperature controllable between 72° F (22.2° C) and 89° F (31.7°C) and relative humidity between 45% and 80%. Electronic equipment installed in the base generates approximately 2,500 BTU/Hr in heat load.

Audible fan/vent noise shall be limited to 35dBA sound pressure as measured one meter from the console enclosure."

26. On the Excel sheets you provided there isn't a line item for a 2ru rack.

Allthough the design is capable of accommodating two rack unit (2RU) to fourteen rack unit (14RU) configurations, the console design only requires the types of rack units defined in Attachment J-3 - NNK09280440R - CONSOLE ENCLOSURE CONFIGURATIONS.pdf and in section B of the solicitation, therefore this type of rack unit is not included in the spreadsheets provided.